State Office of Administrative Hearings

Cathleen Parsley
Chief Administrative Law Judge
June 5, 2009

Les Trobman, General Counsel
Texas Commission on Environmental Quality
P.O. Box 13087
Austin Texas 78711-3087

Re: SOAH Docket No. 582-08-2177; TCEQ Docket No. 2007-1765-MWD; In Re: In the Matter of the Application of TCB Rental, Inc. for New Wastewater Permit, Proposed Texas Pollutant Discharge Elimination System, Permit No. WQ0014725001

Dear Mr. Trobman:

The above-referenced matter will be considered by the Texas Commission on Environmental Quality on a date and time to be determined by the Chief Clerk's Office in Room 201S of Building E, 12118 N. Interstate 35, Austin, Texas.

Enclosed are copies of the Proposal for Decision and Order that have been recommended to the Commission for approval. Any party may file exceptions or briefs by filing the original documents with the Chief Clerk of the Texas Commission on Environmental Quality no later than **June 25, 2009**. Any replies to exceptions or briefs must be filed in the same manner no later than **July 6, 2009**.

This matter has been designated **TCEQ Docket No. 2007-1765-MWD; SOAH Docket No. 582-08-2177**. All documents to be filed must clearly reference these assigned docket numbers. Copies of all exceptions, briefs and replies must be served promptly on the State Office of Administrative Hearings and all parties. Certification of service to the above parties and an **original and seven copies** shall be furnished to the Chief Clerk of the Commission. Failure to provide copies may be grounds for withholding consideration of the pleadings.

Sincerely,

Michael J. O'Malley
Administrative Law Judge

MJO/sb
Enclosures
cc: Mailing List

STATE OFFICE OF ADMINISTRATIVE HEARINGS

AUSTIN OFFICE
300 West 15th Street Suite 502
Austin, Texas 78701
Phone: (512) 475-4993
Fax: (512) 475-4994

SERVICE LIST

AGENCY: **Environmental Quality, Texas Commission on (TCEQ)**

STYLE/CASE: **TCB RENTAL, INC**

SOAH DOCKET NUMBER: **582-08-2177**

REFERRING AGENCY CASE: **2007-1765-MWD**

STATE OFFICE OF ADMINISTRATIVE HEARINGS	**ADMINISTRATIVE LAW JUDGE** **ALJ MICHAEL J. OMALLEY**
REPRESENTATIVE / ADDRESS	**PARTIES**
D.A. CHRIS EKOH STAFF ATTORNEY TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ENVIRONMENTAL LAW DIVISION, MC 173 PO BOX 13087 AUSTIN, TX 78711 (512) 239-5487 (PH) (512) 239-0606 (FAX)	(COURTESY COPY)
ELI MARTINEZ PUBLIC INTEREST COUNSEL TEXAS COMMISSION ON ENVIRONMENTAL QUALITY 12100 PARK 35 CIRCLE, MC-103, BUILDING F AUSTIN, TX 78753 (512) 239-6363 (PH) (512) 239-6377 (FAX)	OFFICE OF PUBLIC INTEREST COUNSEL
GEOFFREY P KIRSHBAUM ATTORNEY AT LAW THE TERRILL FIRM, P.C. 810 WEST 10TH STREET AUSTIN, TX 78701 (512) 474-9100 (PH) (512) 474-9888 (FAX)	TCB RENTAL, INC.

AMY RICKERS
ATTORNEY
MUNSCH, HARDT, KOPF & HARR, P.C.
3800 LINCOLN PLAZA
500 NORTH AKARD STREET
DALLAS, TX 75201
(214) 880-7692 (PH)
(214) 978-4339 (FAX)

KOONTZ BAYOU OLD RIVER GROUP

JEAN KILLGORE
P.O. BOX 625
SOMERVILLE, TX 77879
(979) 272-8727 (PH)
(979) 272-9181 (FAX)

JEAN KILLGORE

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xc: Docket Clerk, State Office of Administrative Hearings

SOAH DOCKET NO. 582-08-2177
TCEQ DOCKET NO. 2007-1765-MWD

IN THE MATTER OF THE APPLICATION OF TCB RENTAL, INC. FOR NEW WASTEWATER PERMIT, PROPOSED TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM, PERMIT NO. WQ0014725001	§	**BEFORE THE STATE OFFICE**
	§	
	§	
	§	**OF**
	§	
	§	**ADMINISTRATIVE HEARINGS**

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IN THE MATTER OF THE APPLICATION OF TCB RENTAL, INC. FOR NEW WASTEWATER PERMIT, PROPOSED TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM, PERMIT NO. WQ0014725001	§	**BEFORE THE STATE OFFICE**
	§	**OF**
	§	**ADMINISTRATIVE HEARINGS**

PROPOSAL FOR DECISION

I. INTRODUCTION

TCB Rental, Inc. (TCB or Applicant) applied to the Texas Commission on Environmental Quality (TCEQ or Commission) for a new Texas Pollutant Discharge Elimination System (TPDES) permit authorizing the discharge of effluent from a wastewater treatment plant facility that will treat domestic wastewater in Burleson County, Texas. The maximum amount of permitted daily average flow would be 25,000 gallons per day. The treated effluent will be discharged into an unnamed ditch on TCB's property for almost a mile, then to the Koontz Bayou Drain, then to Koontz Bayou, then to the Old River, and then to the Brazos River.

The Executive Director (ED) did not participate in this proceeding as a party, but TCEQ Staff approved the Draft Permit.[1] The Commission determined that Jean Killgore, Leonard Killgore,[2] Douglas R. Kettler,[3] and the Koontz Bayou Old River Group (KBOR) were affected persons and referred their hearing requests to the State Office of Administrative Hearings (SOAH). KBOR and the Killgores[4] oppose the permit. The Office of Public Interest Counsel (OPIC) participated as a party to the proceeding and also opposes the permit. Based on the evidence presented at hearing, the Administrative Law Judge (ALJ) recommends that the Commission approve TCB's permit application.

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[1] TCB called two TCEQ witnesses, Louis C. Herrin, III, P.E. and Kent H. Trede. The ED's attorney appeared at the hearing when these witnesses testified but did not present witnesses or offer any evidence.

[2] Jean Killgore participated at the hearing but, because of his health, Leonard Killgore did not participate.

[3] Mr. Kettler did not appear at the preliminary hearing and was never named a party.

[4] Although Jean and Leonard Killgore were named as parties, they adopt the position of KBOR.

II. PROCEDURAL HISTORY, NOTICE, AND JURISDICTION

On June 29, 2006, Applicant filed its initial application for the wastewater discharge permit that is the subject of this proceeding. The application seeks a new permit for a wastewater treatment plant that will be located in Burleson County, Texas.

The application was declared administratively complete on July 20, 2006. Notice of the receipt of the application and intent to obtain a water quality permit was published in the *Burleson County Tribune* on August 3, 2006. TCB's application was deemed technically complete, and the TCEQ ED's Draft Permit (Draft Permit) and Preliminary Decision (dated October 26, 2006) were issued on December 7, 2006, notice of which was published on December 21, 2006, in the *Burleson County Tribune*.

A public notice and comment period followed. On February 13, 2008, the TCEQ Commissioners considered hearing requests. The Commission granted the hearing requests of Jean and Leonard Killgore, Douglas R. Kettler, and KBOR. On March 11, 2008, the Commission referred the hearing requests to the SOAH. The preliminary hearing in this case was conducted on May 5, 2008. The hearing on the merits was held on February 18-20, 2009, in Austin, Texas.[5] The record closed on April 20, 2009, after the parties submitted written closing arguments and reply briefs.

There are no contested issues of notice or jurisdiction, so those matters are set forth in the findings of fact and conclusions of law in the proposed order attached to this proposal for decision (PFD).

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[5] The Commission originally placed a nine-month deadline on this case. However, the parties needed additional time to develop the issues in this case and hire additional experts; therefore, the nine-month deadline was extended indefinitely to accommodate the parties. Furthermore, TCB requested a variance on the access road requirement, and the TCEQ Staff did not approve the variance until February 4, 2009. 30 TEX. ADMIN. CODE § 80.4(c)(17).

III. THE COMMISSION'S REFERRED ISSUES

In granting hearing requests in this case and referring the matter to SOAH, the Commission identified the specific issues it wanted the ALJ to address. Those issues are as follows:

1. Whether the proposed discharge will be in compliance with regulations that are intended to protect water quality or regulations that are intended to protect the health and safety of humans, native wildlife, or livestock;

2. Whether the facility is located in a one-hundred (100) year flood plain and if so, whether the Applicant will comply with Section 309.13(a) of the Commission rules;

3. Whether the facility will meet the rule requirements intended to reduce nuisance odor conditions;

4. Whether the Applicant can meet the all-weather access road requirement in 30 TEX. ADMIN. CODE § 317.7(e); and

5. Whether the Applicant can meet the private water well buffer requirement in 30 TEX. ADMIN. CODE § 309.13.

Each of the referred issues is addressed below as directed by the Commission. The ALJ will provide an overview of the proposed facility before discussing the referred issues.

IV. DISCUSSION

A. Background of TCB and Description of Proposed Facility

TCB currently hauls domestic wastewater for mobile-home residences at oil and gas drilling sites. The mobile-home residences produce domestic wastewater that is delivered to and stored in a holding tank until TCB picks it up to deliver it for treatment. Municipally-owned facilities currently treat the domestic wastewater TCB hauls. After relying on these facilities for many years, TCB seeks to build its own facility to treat its domestic wastewater.

The proposed facility site and discharge point are located on rural property in Burleson County, Texas, on Farm-to-Market Road (FM) 50, approximately 1.4 miles south of the intersection of FM 50 and FM 1361. TCB owns the property on which the proposed wastewater treatment plant will be located as well as the property where the treated effluent will be discharged. The maximum amount of permitted daily average flow would be 25,000 gallons per day (described as the equivalent of a one-inch hose). The treated effluent will flow into an unnamed ditch on TCB's property for almost a mile, then to the Koontz Bayou Drain, then to Koontz Bayou itself, then to the Old River Basin, then to the Brazos River above the Navasota River in Segment No. 1242 of the Brazos River Basin.[6] The entire discharge route up to the point where the unnamed ditch empties into the Koontz Bayou Drain is now located within property owned by either TCB or Carl Buckner, its President and Owner.

The proposed effluent limitations to comply with the Draft Permit include a daily average of 10 milligrams/liter (mg/L) (5-day) carbonaceous biological oxygen demand; 15 mg/L total suspended solids (TSS); and 3 mg/L ammonia nitrogen. Additionally, the effluent would be required to maintain a chlorine residual of at least 1.0 mg/L and a minimum dissolved oxygen level of 4.0 mg/L. These are standard TPDES permit effluent limits for domestic wastewater treatment plants in the geographic area where TCB's proposed plant would be located. Under the Draft Permit, industrial or hazardous wastes will not be hauled or treated by TCB.

The treatment process proposed by TCB in its plant design is the extended aeration mode of the activated sludge process. The primary difference between TCB's plant and other domestic wastewater treatment plants in Texas is that it has no wastewater collection lines that directly connect the facility with customers. Instead, TCB uses trucks to transport the wastewater to the plant for treatment.

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[6] The Brazos River is approximately five miles away from the discharge point.

With that brief summary, the ALJ now turns to a discussion of the Commission's referred issues.

B. Whether the Proposed Discharge will be in Compliance with Regulations that are Intended to Protect Water Quality or Regulations that are Intended to Protect the Health and Safety of Humans, Native Wildlife or Livestock

The effluent limits for the proposed discharge included in the Draft Permit were modeled by TCEQ. The standards were set using TCEQ procedures used in other domestic wastewater treatment permits. TCEQ Staff performed an analysis on the impact of the effluent on the receiving waters. TCEQ Staff also determined that the existing water quality uses would not be impaired by TCB's permit. TCEQ's analysis further indicated that no significant degradation of quality is expected in the water downstream, and the existing uses will be maintained and protected.[7] The influent is expected to remove over 96% of the incoming biochemical oxygen demand and will be disinfected to allow discharge into a stream rated for recreational contact.[8]

Although TCB maintains that its plant has been designed to ensure compliance with the protective effluent limits in the Draft Permit, OPIC and KBOR challenge the quality and quantity of TBC's effluent.[9]

1. OPIC's Position

OPIC's primary concern is that TCB did not prove that a minimum consistent volume could be anticipated at the proposed plant. Although OPIC did not have concern about the characterization of the effluent, it maintains that TCB did not show that a minimum amount of waste would be fed into the plant to prevent underloading, which might impact the plant's ability

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[7] TCB Ex. 15.

[8] TCB Ex B, D. Ray Young Prefiled Direct at 19.

[9] The ALJ will set forth OPIC's and KBOR's arguments, followed by TCB's response, and then the ALJ's analysis and recommendation.

to meet its permitted effluent set.[10] OPIC realizes that TCB has indicated that it will truck in wastewater from other remote locations if the influent levels are low, but OPIC is not satisfied that there will be a consistent demand for wastewater treatment at the plant, especially given that TCB still intends to use municipal wastewater plants to treat its wastewater, primarily in Fort Worth and Marshall.[11] OPIC argues that the volume of the influent could impact the efficacy of the bacteria in the plant, causing the effluent to have higher nutrient levels. According to OPIC, changes in the nutrient levels could cause problems along the discharge route if flooding occurs, leading to high levels of bacteria and other effluent constituents onto nearby properties in violation of TEX. WATER CODE ANN. § 26.003.

OPIC also maintains that the nuances of the discharge route were not taken into consideration by TCB or TCEQ Staff. OPIC points out that Kent Trede, permit writer for the TCEQ Municipal Wastewater Permitting Division, testified that the effluent limits for this application are standard.[12] OPIC contends, however, that TCEQ did not account for certain factors in reaching its conclusion that the effluent limits are standard and acceptable. OPIC believes that additional information should have been considered. For example, OPIC argues that the discharge route contains obstructive vegetative growth and silting-in that were not considered. OPIC also does not believe that the nutrient makeup of the runoff from the upstream turf farm was considered. OPIC maintains that the Koontz Bayou channel currently has flow complications that will only get worse from the nutrient loading due to the discharge.

2. KBOR's Position and Evidence

KBOR asserts that the waste will be more highly concentrated than presented in TCB's application. Michael Golladay, KBOR's expert, testified that the wastewater from the oil-field workers will have some concentration of petroleum hydrocarbons and crude oil, which is not

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[10] Tr. at 59.

[11] Tr. at 246.

[12] Tr. at 265.

typical of domestic wastewater. He maintains that there is the potential for industrial components containing barium, arsenic, cadmium, lead, and zinc to be introduced into the domestic wastewater.[13] KBOR also questions why TCB never tested samples of its wastewater to determine its constituency. Cathy Dougherty, another KBOR expert, testified that she does not believe the waste will meet its design standard; she opines that it will have a much higher concentration.[14] KBOR argues that these materials are likely to be introduced into the domestic wastewater.[15] Without ensuring the influent makeup, KBOR maintains that TCB is "turning a blind eye to a potential problem and inability to meet the influent limits."[16] Moreover, it states that an unknown influent source does not allow TCB to know if it can comply with the effluent limits based on an improper influent characterization. The problem is exacerbated because TCB has failed to show that it will have access to the plant five days a week to allow it to properly monitor the operation of the plant.

Like OPIC, KBOR also contends that TCB did not conduct a proper evaluation of the receiving stream. Without the proper evaluation of the receiving stream, KBOR states there is no guarantee that the water quality, health and safety of humans, native wildlife, or livestock will be protected, according to KBOR.

Finally, KBOR claims that TCB is considering building a holding pond on the site, though not specifically mentioned in the permit application.[17] KBOR asserts that by delaying the disclosure of the holding pond, TCB is circumventing the notice requirements.[18]

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[13] Tr. at 387; and 398.

[14] Tr. at 561.

[15] Furthermore, KBOR asserts that the low-flow fixtures in the temporary housing units allow for little dilution of the additional industrial-type constituents.

[16] KBOR Initial Brief at 11.

[17] KBOR Ex. 18 at 10; TCB Ex. 25 at. 2.

[18] Tr. 623-624.

3. TCB's Position and Evidence

TCB argues that OPIC's concern about the demand for wastewater treatment is not a referred issue; therefore, outside the scope of this hearing. However, if the ALJ finds that concern relates to the first referred issue, TCB asserts that if the plant needs wastewater, TCB will bring it regardless of whether it has to come from East Texas or other parts of the state TCB serves.[19] TCB further contends that OPIC's argument on underloading ignores D. Ray Young, P.E.'s testimony that if TCB's influent is underloading or overloading the plant by as much as 50% either way, the flexibility of the plant's extended aeration process will allow the plant to handle the influent without adversely affecting effluent quality.[20] TCB also point out that a plant operator can bring in seed sludge if plant operations are disrupted.[21]

TBC disputes that that there is an issue with the receiving stream. It points out that the Koontz Bayou Drain receives water from multiple sources, not just the ditch that constitutes the receiving stream for TCB's effluent.[22] TCB asserts that the TCEQ's modelers analyzed the unnamed ditch and the Koontz Bayou Drain, even visiting the site, and recommended approval of the Draft Permit with the specified effluent limits.[23] TCB states that its expert, Mr. Young, assessed the capability of the receiving ditch to accommodate TCB's proposed flow volume, and TCB is convinced that the receiving ditch is more than suitable for flow generated by TCB's plant.

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[19] Tr. at 246.

[20] Tr. at 90.

[21] Tr. at 116.

[22] TCB Ex. 1, TCB Application.

[23] TCB Ex. 16; and TCB Ex. 22 at 59.

With regard to nutrient loading contributing to the growth of vegetation in Koontz Bayou and possible flooding, TCB contends that there is no evidence to support this theory. Furthermore, according to TCB, the issue that the discharge will cause or significantly contribute to flooding in the area around Koontz Bayou was rejected by the Commission and not referred to SOAH.[24]

TCB disputes that its influent will be anything other than ordinary domestic wastewater.[25] TCB also refutes KBOR's argument that the wastewater from the mobile residences will have little dilution. TCB argues that a TPDES permit application does not require testing to evaluate influent to receive a permit. In its application, TCB assumed the organic strength of the influent based on the wastewater source, which is all that it is required to do.[26] According to TCB, residential domestic wastewater strength is presumed to be 200 mg/L BOD_5 for plant design purposes, but its experts incorporated a more conservative BOD_5 figure (300mg/L) and conservative incoming domestic wastewater volume figures.[27]

TCB emphasizes that it will not allow non-domestic wastewater to be delivered to and treated at the plant because it is specifically prohibited by the Draft Permit.[28] TCB reiterates that it will have a licensed operator running the plant and his job will be to keep non-domestic wastewater from entering the plant.

Furthermore, TCB contends Mr. Herrin testified that this type of plant could run on its own for an entire week without problems and without anyone looking at it if necessary.[29] And, TCB's expert Mr. Young testified that it would take 60-120 days for plant bacteria to die if they

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[24] Hearing Request February 13, 2007 Agenda, Item 2.

[25] TCB Ex. 8, D. Ray Young Prefiled Direct Testimony at 8-9; TCB Ex. 1, TCB's Application.

[26] TCB Ex. 1, Application at 5-6.

[27] Tr. at 135-136.

[28] TCB Ex. 7, Draft Permit at 9.

[29] Tr. at 320-321.

were not fed by incoming waste[30] Mr. Young further testified that the plant is capable of running safely and automatically on its own for the duration of a 100-year flood event. TCB also intends to install a special monitoring device, such as the Sensaphone 2000, to alert the operator of plant problems during a flooding event.[31]

According to TCB, the pond mentioned in the Geotechnical Report is not part of this permit application, and it is not seeking such authorization as part of this application process.

TCB argues that a Waste Load Evaluation is not required for every stream segment in the State. TCB claims that a Waste Load Evaluation is a report that is typically prepared by TCEQ about specific Texas water bodies with water quality problems, such as the Houston Ship Channel (used to provide information for use in considering wastewater discharge permits for those receiving waters). TCEQ could also use calculated Total Maximum Daily Loads (the total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards). The QUAL-TX model (used if a Waste Load Evaluation is not available) is a one-dimensional, steady-state water quality model used to determine if the water quality standard for dissolved oxygen will be met in water bodies receiving wastewater discharges.[32] QUAL-TX can produce effluent limits for all the following parameters: biochemical oxygen demand or carbonaceous biochemical oxygen demand, ammonia nitrogen, and dissolved oxygen.[33] Because TCEQ has not completed a Waste Load Evaluation for Segment 1242, TCB argues that TCEQ appropriately used the QUAL-TX model for evaluating TCB's TPDES permit application in accordance with the *Procedures to Implement the Texas Surface Water Quality Standards* and TCEQ rules.[34]

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[30] Tr. at 58-60.

[31] TCB Ex. E, Additional Prefiled Direct of D. Ray Young, at 21-22.

[32] *Waste Load Evaluation WLE-1R for the Houston Ship Channel System*, Texas Commission on Environmental Quality, Austin, Texas (September 2006) at 18.

[33] *Procedures to Implement the Texas Surface Water Quality Standards*, RG-194 (Revised), Texas Commission on Environmental Quality, Austin, Texas (January 2003), at 18.

[34] TCB Ex. 16.

4. ALJ's Analysis

Applicants are presented with many obstacles when designing wastewater treatment plants but, in this case, TCB and its engineers considered various situations, such as underloading, and designed the plant to accommodate these situations. Furthermore, with regard to the effluent, there are certain effluent standards that the Commission has adopted and any applicant must adhere to those standards when designing a wastewater treatment facility. TCB and the TCEQ Staff considered these standards and recommended approval of the quality and quantity of TCB's effluent.

Although OPIC and KBOR raised various issues about the quality and quantity of the effluent, none of them are supported by the evidence. OPIC's concern[35] about underloading of influent is an example of an issue not supported by the evidence. In this case, TCB considered underloading and, if underloading occurs and the plant needs wastewater, TCB will bring wastewater from other areas in which TCB serves. Because TCB's headquarters is located in Brenham, Texas, near the plant site, bringing extra loads to the site can be accomplished.[36] More importantly, if the influent is underloading or overloading the plant by as much as 50% either way, the flexibility of the plant's extended aeration process will allow the plant to handle the influent without adversely affecting effluent quality.[37] TCB has shown that its plant can adequately address underloading or overloading of influent.[38]

Again, OPIC and KBOR present an unsubstantiated argument about the quality of the receiving stream. OPIC claims that there is the potential for overgrown, obstructive vegetation,

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[35] The ALJ notes that OPIC participated at the hearing but did not offer any evidence to support its position. In fact, OPIC did not take a position at the hearing. The ALJ and the other parties learned of OPIC's position on the various issues for the first time when OPIC filed its post-hearing brief.

[36] Tr. at 246-247.

[37] Tr. at 90. Mr. Young adequately addressed this issue at the hearing.

[38] Although OPIC raised the issue of underloading, it failed to address the plant's extended aeration process. OPIC focused only on the trucks hauling a sufficient quantity of wastewater.

silting-in, and problems from the upstream turf farm.[39] It is important to note that Koontz Bayou receives water from multiple sources, not just the unnamed ditch that constitutes the receiving stream for TCB's effluent.[40] It is significant that the TCEQ Staff analyzed the impact of the effluent on the unnamed ditch and concluded that "the proposed effluent set …was adequate to ensure the dissolved oxygen level will be maintained above the criteria established by the Standards Team for the unnamed drainage ditch (2 mg/L) and the Koontz Bayou Drain (2 mg/L)."[41] There is no evidence that a further study, such as Waste Load Evaluation, of the multiple discharge sources was required in this case or would have produced any additional information to address the impact of TCB's effluent on the receiving stream. Furthermore, the maximum amount of permitted daily flow is 25,000 gallons per day. This minimal daily flow would not warrant multiple studies without some evidence that problems are occurring or likely to occur. Without evidence to the contrary, the receiving stream will accommodate TCB's proposed effluent without causing problems such as overgrown vegetation.

KBOR argues that the influent will be more highly concentrated than ordinary domestic wastewater, and that the wastewater from the mobile-home residences will have little dilution. Mr. Golladay, KBOR's expert witness, testified that the wastewater generated from workers on drilling sites poses a problem because they come in contact with petroleum hydrocarbons and crude, which TCB's plant is not designed to treat.[42] Although the workers who reside in the mobile homes work in the oil fields, there is no evidence that their wastewater contains industrial-type contaminants as Mr. Golladay alleges. Although Mr. Golladay may have correctly testified about the components, such as arsenic and lead, that comprise drilling fluids, there is no evidence that these components will be in the wastewater treated by TCB. Furthermore, hypothesizing about what components may be in wastewater for a particular plant

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[39] There is no evidence that the turf farm has presented any problems to the unnamed ditch, the Koontz Bayou Drain, Koontz Bayou, the Old River, or the Brazos River.

[40] TCB Ex. 1, TCB Application.

[41] TCB Ex. 16. TCEQ Staff also visited the site. TCB Ex. 22 at 59-61.

[42] Tr. at 387.

is not an exercise that is appropriate.[43] For any wastewater treatment facility, one could imagine many possible components that are in the wastewater.[44] In this case, TCB assumed the organic strength of the influent based on the wastewater source.[45] The evidence shows that residential domestic wastewater strength is approximately 200 mg/L BOD_5 for plant design purposes, but TCB used a more conservative BOD_5 figure (300mg/L) (more commonly used for commercial plants).[46]

In addition, TCB will not allow non-domestic wastewater to be delivered (or treated) at its plant.[47] The evidence also shows that TCB's plant will operate safely on its own for the duration of a 100-year flood event because TCB intends to install a special monitoring device, such as the Sensaphone 2000, to alert the operator of plant problems during the event.[48] Moreover, TCEQ Staff analyzed the influent in this case and recommended approval of TCB's treatment plant. If the TCEQ Staff had concerns with the influent, it would be obligated to have TCB address those issues before it approved the Draft Permit. Finally, there is no evidence to support KBOR's argument that the wastewater from the mobile homes will have minimal dilution.

With regard to the retention pond, TCB confirms that the pond mentioned in the geotechnical report is not part of this permit application, and it is not seeking such authorization as part of this application process. Accordingly, the pond is not an issue to be decided in this case.

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[43] Mr. Golladay's argument about the components of TCB's wastewater borders on speculation. Not only is his argument not supported by any evidence, it would clearly not require TCB to test or sample the wastewater.

[44] Testing or sampling of the wastewater is not required under the Water Code or the TCEQ rules.

[45] TCB Ex. 1, Application at 5-6.

[46] Tr. at 135-136.

[47] TCB Ex. 7, Draft permit at 9.

[48] TCB Ex. E, Additional Prefiled Direct of D. Ray Young, at 21-22.

In its arguments, KBOR (and to a lesser degree OPIC) suggests that TCB should have conducted various studies before approval of the Draft Permit. The evidence does not support the additional studies, such a Waste Load Evaluation. Because TCEQ has not completed a Waste Load Evaluation for Segment 1242, TCEQ used the QUAL-TX model for evaluating TCB's TPDES permit application in accordance with the *Procedures to Implement the Texas Surface Water Quality Standards* and TCEQ rules.[49]

Mr. Golladay suggested that TCB should have conducted a study on the effectiveness of the proposed treatment plant's ability to remove nitrates and phosphates, a study on the dosing of sodium hypochlorite with respect to the content of the proposed discharge, a surface water hydrological study of the drainage swale, and a study of the impact that the volume of the discharge will have on the stream channel and further downstream.[50] Interestingly, Mr. Golladay does not cite to any rule that requires an applicant to conduct these studies, especially given that there is no evidence to warrant such studies. The evidence shows that TCB's influent will be properly treated at the more conservative BOD_5 figure (300mg/L). Therefore, TCB has shown that it has complied with the regulations intended to protect water quality, and the health and safety of humans, native wildlife, and livestock.[51]

C. Whether the Facility is Located in a One-Hundred Year Flood Plain and if so, Whether the Applicant will Comply with Section 309.13(a) of the Commission Rules

There is no dispute that TCB's proposed wastewater treatment is located in a 100-year floor plain. Many wastewater plants in Texas are located within a 100-year flood plain, and the Commission has adopted rules that relate to this issue. The rule at issue here states that "[a] wastewater treatment plant unit may not be located in the 100-year flood plain unless the plant is

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[49] TCB Ex. 16.

[50] KBOR Ex. 16, Golladay Prefiled Direct Testimony at 7-8.

[51] The ALJ notes that KBOR requested that TCB conduct multiple studies as discussed in the PFD; however, there is no requirement that these studies be conducted. In fact, TCB conducted a geotechnical study, which was not required by rule or suggested by TCEQ Staff, to address KBOR's concerns about the foundation of the plant. Although the study is quite comprehensive, KBOR asserted that it did not address all of its concerns.

protected from inundation and damage that may occur during that flood event." 30 TEX. ADMIN. CODE § 309.13(a). Further, the Commission may not issue a permit for a wastewater treatment plant if the plant does not meet the requirements of § 309.13. 30 TEX. ADMIN. CODE § 309.14.

1. OPIC's Position

OPIC is satisfied that Mr. Young, TCB's engineer expert, has adequately performed the calculations and specified the necessary material to ensure that TCB's wastewater treatment plant would withstand the weight of the water during a 100-year flood event. Therefore, OPIC asserts that TCB has complied with 30 TEX. ADMIN. CODE § 309.13(a).

2. KBOR's Position and Evidence

KBOR, however, contends that TCB has not established that its design, construction, and operation of the plant will withstand a 100-year flood event. KBOR presents several arguments in an attempt to establish that the proposed plant will not survive a 100-year flood event. First, KBOR argues that TCB improperly determined the 100-year flood level because it used out-dated maps. TCB's interpolation of the 100-year flood plain used a 1989 Flood Insurance Rate Map and 1980 United States Geologic Service Maps.[52] TCB claims that without more recent maps, TCB should have performed a hydrologic study, which it did not perform. KBOR argues that properly determining the 100-year flood level is crucial because if the calculation is off by one and one-half feet (the wall height is 220 feet above mean sea level, and the interpolated 100-year flood plain level estimate is 218.5 feet above mean sea level), the plant will likely be inundated and damaged during a 100-year flood event.[53] KBOR contends that there is the very

[52] TCB Ex. B, Ray Young Prefiled Direct at 27; and TCB Ex. C, Shelley Young Prefiled Direct at 30.

[53] Tr. at 100.

real possibility that this error may have occurred, based on the known changes in elevation, and TCB cannot ensure that the plant will not be inundated and damaged during a100-year flood event.[54]

Second, KBOR argues that the four-inch check valve located below the 100-year flood plain level and the piping at the influent line is not protected from flood waters. KBOR claims that if either the check valve or the influent pipe is damaged, there is a likelihood that a breach of the system's protection will occur and materials other than the intended wastewater may enter the system preventing the permit limits from being achieved. According to KBOR, it expert witness, Cathy Dougherty, has seen plants inundated that were built three to five feet above estimated flood levels. For this plant, she has not seen sufficient analysis to show TCB's plant can withstand even minor flooding.[55]

Third, KBOR is concerned that the geotechnical report, while stating that the foundation is structurally sound, does nothing to evaluate methods in which it might be affected and undermined. KBOR asserts that to ignore potential impacts on the foundation makes the analysis questionable. KBOR asserts that the rest of the plant must remain in place as well, but there are no engineering studies or information in the design specs that ensure the plant's structural safety.[56]

Finally, KBOR called several witness from the area to discuss the flooding events, and their impact. KBOR recognizes that these individuals may not be experts in the engineering and operation of the proposed plant, but it claims that they are more knowledgeable on the impacts of the flooding experienced in the area. KBOR argues that TCB simply wants to ignore the flooding that occurs in this area. KBOR further maintains that not only did TCB's analysis not

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[54] KBOR also notes that no weather research or open channel studies were performed.

[55] Tr. at 548.

[56] KBOR realizes that the TCEQ staff has approved the Draft Permit, but it argues that TCEQ was given inaccurate and incomplete information.

evaluate the structural integrity of that plant during a hundred-year flood event, it did not include any analysis of the impact of waters receding from 100-year flood.[57]

3. TCB's Position and Evidence

TCB contends that the interpolation process is a proper method for determining the 100-year flood plain. TCB maintains that it used the most current maps available. Although KBOR asserts that additional studies should have been performed -- such as a topographical survey, a hydrologic study, weather research, and open channel studies -- TCB maintains that KBOR failed to explain how these studies would help to determine the 100-year flood elevation. Furthermore, it contends that there is no legal basis for performing these additional studies. TCB maintains that the evidence shows that its experts properly estimated the 100-year flood elevation for the site through a commonly-used practice of interpolation that is now officially incorporated into the TCEQ's rules.[58] In addition, TCB notes that WaterEngineers, Inc. used a more conservative estimated elevation figure than if it had relied solely on USGS and FEMA maps alone (as opposed to their GPS-guided survey of the actual site elevation). TCB estimates that, with the conservative estimate and facility design, there is an additional three-feet factor of safety incorporated into protection from a 100-year flood.[59]

TCB argues that the extent of flooding in the area, the duration of flooding in the area, and the impact of a 100-year flood event were fully analyzed for compliance with the TCEQ TPDES permitting rules and Chapter 317 design criteria.[60]

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[57] Tr. at 219 and 315. KBOR notes that Mr. Herrin did not conduct an independent review of the 100-year flood plain. Tr. at 298.

[58] TCB Ex. B. D. Ray Young Prefiled Direct at 26; 30 TEX. ADMIN CODE 217.35(a)(3).

[59] Tr. 600-602.

[60] TCEQ approved the design plan.

TCB described its basic plan for protecting the wastewater treatment plant units by making the walls of the treatment plant higher than the 100-year frequency flood level and, additionally, by elevating other equipment above that level. At the time of application, TCB maintains that there was no need to determine the exact 100-year flood elevation level because TCB was committed to elevating the top of the plant's wall and equipment above that level regardless of its height.[61]

TCB completely disagrees with KBOR assertion that the plant will not withstand a 100-year flood event. In designing TCB's wastewater treatment plant, TCB's reiterates that its experts designed the facility to withstand forces greater than those that might be placed on those units during a 100-year flood.[62] TCB offers the following description of the plant to support its argument that the facility will withstand a 100-year flood event. The 12-inch walls containing the treatment units have an elevation 220 feet above mean sea level and will be made of steel-reinforced concrete with a specified minimum compressive strength of 4,000 pounds per square inch, along with other beneficial specifications.[63] According to TCB, this type of concrete usually provides compressive strength even-stronger than the specification, usually in the 5,000-6,000 pounds-per-square-inch range.[64] Walls made out of this concrete routinely stand up to the pressure of water on the inside without showing any sign of cracking.[65] Finally, Mr. Young testified that the ability of the specified concrete to withstand the flow of water or the impact from any debris that might be floating in a 100-year flood, or lesser level of flood water, is substantial. The concrete could even withstand the force of a backhoe being driven into the wall.[66]

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[61] TCB Ex. 1, Application at 7.

[62] Tr. 590-596.

[63] Tr. 144-150; Tr. 595; and TCB Ex. 23, Amended Plans and Specifications.

[64] Tr. at 595.

[65] Tr. at 595-596.

[66] Tr. at 596-598.

TCB argues that general flooding information is not a referred issue. Moreover, it believes that the Commission specifically rejected referral of generalized flooding as an issue. Since the plant will be protected from a 100-year flood event, TCB asserts that the plant will also be protected from less extreme flood events. Although TCB recognizes that flooding has occurred in the area, TCB states that there is no evidence of a 100-year flood event near TCB's plant. Although KBOR's witnesses testified about flooding on their property, TCB does not believe KBOR's witnesses have knowledge of the depth of flood waters that were at TCB's site during the particular flood they described. TCB argues that KBOR's witnesses' limited observations were not made directly on TCB's site, nor do they take into account the elevated pad site and access road.[67]

TCB does not believe that the plant's chlorine chamber will be inundated during a flood event because TCB has installed a check valve on the effluent line, eliminating the potential of inundation and damage of the chlorine contact chamber. TCB points out that the connected effluent line is located only slightly below elevation 218.5 above mean sea level.[68] According to TCB, the addition of the check valve allowed TCB to gain full approval of its design plans and specifications from TCEQ.[69] It now opines that its wastewater treatment plant is fully protected from a 100-year flood event with a significant margin of safety beyond what the TCEQ rules require.

TCB strongly disagrees with KBOR it was required to submit its geotechnical engineering and structural design information to TCEQ for approval with its TPDES permit application or during the plans and specifications review process. TCB contends that the geotechnical engineering and structural design information is not typically part of the TPDES permitting process.[70] According to TCB, TCEQ relies on engineering reports provided by the

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[67] KBOR Ex. 3H, Picture.

[68] TCB Ex. E, D. Ray Young Additional Prefiled Direct at 10-12.

[69] TCB Ex. 28, Approval Letter.

[70] TCB Ex. 17, D. Ray Young Additional Prefiled Direct at 17-18.

various experts when making construction design recommendations for a domestic wastewater treatment plant following approval of a TPDES permit. Once TCB's permit was approved by the TCEQ Staff, it incorporated geotechnical engineering and structural design considerations into the plant's design, including recommendations obtained through the Geotechnical Engineering Report provided by Terracon.[71]

TCB asserts that KBOR's criticism of the Terracon Geotechnical Engineering Report (that it did not consider erosion around the plant) is absurd because the evidence shows the plant will be supported by underreamed footings at least 20 feet below the existing ground surface and 25 feet below the bottom of TCB's treatment plant.[72] The underreamed footings anchor the plant in place at that depth. [73] According to TCB, these anchors will keep the plant from floating away if there are uplift or buoyancy forces caused by flood waters.[74] In addition, TCB emphasizes that the plant foundation will be poured on void boxes, rather than on grade, eliminating the effect of any soil movement that may occur at the base of the plant.[75]

TCB also disagrees with KBOR that external pipes will not be protected by TCB,s design. TCB argues that its external pipes will be protected because they are made of protective ductile iron pipe with retained follower glands, so that they will not be damaged or disconnected by movement of the soil.[76] Furthermore, TCB argues that these fixtures are not considered wastewater treatment plant units within the definition found in section 309.11(9), since they are essentially conduits and not used for any treatment process.[77]

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[71] TCB Ex. 17, D. Ray Young Additional Prefiled Direct at 12-17; TCB Ex. 23, Amended Plans and Specification.

[72] Tr. at 598-600.

[73] Tr. at 196-197.

[74] Tr. at 198-199.

[75] Tr. at 598-600.

[76] TCB Ex. E, D. Ray Young Additional Prefiled Direct at 15.

[77] TCB Ex. 28, Approval Letter.

4. ALJ's Analysis

TCB's proposed plant is in the 100-year flood plain. The Commission recognizes that plants may be located in the 100-year flood plain, and it has enacted rules to address this situation. The fact that plant is located in the 100-year flood plain is not reason enough to deny a permit. TCB, however, has the burden to show that its proposed plant "is protected from inundation and damage that may occur during the flood event." 30 TEX. ADMIN. CODE § 309.13(a). TCB has met that burden.

First, TCB accurately calculated the 100-year flood elevation using interpolation. The interpolation process used by TCB to determine the site's 100-year flood elevation is a proper method for determining the 100-year flood plain. In his testimony, Mr. Young described the interpolation process. He concluded that the 100-year flood elevation is approximately 218.5 feet above the mean sea level. Although the amended TCEQ rules (effective August 2008) on design criteria for domestic wastewater treatment system, allowing for interpolation, do not apply to this case, they are persuasive in showing that interpolation is an accepted method for determining 100-year flood elevation level. Furthermore, in this case TCB conferred with TCEQ staff and confirmed that interpolation was an acceptable method for determining the 100-year flood elevation.[78] Not only was interpolation an appropriate method to use, the maps used in the process were the most current maps and acceptable for use in determining the 100-year flood level.

To further analyze the 100-year flood plain, TCB hired a surveying firm to prepare a topographic study of the facility property to ascertain elevation levels for the plant site. With the information, TCB was able to determine that its proposed facility is 202.5 feet above mean sea level and the depth of the water in a 100-year flood plain event around the facility would be 16 feet. Although TCB took an additional step when it hired a firm to perform a topographic

[78] TCB Ex. B, D. Ray Young Prefiled Direct Testimony at 26-29.

survey, KBOR maintains that TCB should have performed hydrologic, weather research, and open channel studies. Although any additional studies may have provided more information, there is no rule that requires TCB to perform these types of studies. TCB used the accepted method of interpolation to determine the 100-year flood elevation for the site; therefore, hydrology, weather, and open channel studies were not required. Furthermore, TCB estimated the 100-year flood level conservatively, giving the plant an additional three feet of safety protection from a 100-year flood.[79]

Second, TCB's plant will be protected from inundation and damage during a 100-year flood event. The evidence shows that the wastewater treatment plant units will be protected by making the walls of the treatment plant higher than the 100-year flood level and by elevating other equipment above that level. In addition, the 12-inch walls containing the treatment units have an elevation 220 feet above mean sea level and will be made of steel-reinforced concrete with a specified minimum compressive strength of 4,000 pounds per square inch, along with other beneficial specifications.[80] The evidence shows that this type of concrete usually provides compressive strength even stronger, typically in the 5,000-6,000 pounds per square inch range.[81] Walls made out of this concrete routinely stand up to the pressure of water on the inside without showing any sign of cracking.[82] To demonstrate the strength of the walls, Mr. Young, the engineer who designed the plant, testified that if a 1000-pound hay bale hit the 12-inch walls, the treatment plant would withstand such a force, and his testimony was not rebutted.[83]

In addition, after the initial design plans were submitted with the application, TCB made design changes to incorporate suggestions made by the TCEQ Staff and to further ensure that its plant would not be inundated during a 100-year flood event. The evidence shows that TCB has

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[79] Tr. at 600-602.

[80] Tr. at 144.

[81] Tr. at 595.

[82] Tr. at 595-596.

[83] Tr. at 597.

included a four-inch check valve on the effluent line (the connected effluent line is located only slightly below elevation 218.5 above mean sea level) leading away from the plant to prevent inundation of the chlorine chamber. The check valve allows flow out of the plant but prevents flow from going back into the plant.[84] TCB decided to install the valve after discussing its options with Mr. Herrin. After TCB added the check valve to its design plan, TCEQ Staff fully approved its design plan.[85]

Furthermore, TCB hired Terracon to develop a Geotechnical Engineering Report. Again, this report was not required for approval but, to further determine how to protect its plant from a 100-year flood event, TCB had it prepared. The report shows the plant will be supported by underreamed footings at least 20 feet below the existing ground surface and 25 feet below the bottom of TCB's treatment plant.[86] The underreamed footings anchor the plant in place at that depth. [87] These anchors will keep the plant from floating away if there are uplift or buoyancy forces caused by flood waters.[88] In addition, the plant foundation will be poured on void boxes, rather than on grade, eliminating the effect of any soil movement that may occur at the base of the plant.[89]

Another concern of KBOR is that the external pipes will not be protected by TCB's design. The evidence shows that the external pipes will be protected because they are made of protective ductile iron pipe with retained follower glands, so that they will not be damaged or disconnected by movement of the soil.[90] Although KBOR challenges the safety of the pipe, it

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[84] TCB Ex. E, D. Ray Young Additional Prefiled Direct at 10.

[85] TCB Ex. 28, Approval Letter.

[86] Tr. at 598-600.

[87] Tr. at 196-197.

[88] Tr. at 198-199.

[89] Tr. at 598-600.

[90] TCB Ex. E, D. Ray Young Additional Prefiled Direct at 15.

offered no evidence that these pipes would not be protected, nor did it provide any reasonable alternative.

TCB met its burden to show that the plant will be protected from inundation during a 100-year flood event. The strength of the 12-inch concrete wall surrounding the plant and the solid footings of the foundation of the plant show that this plant will withstand a 100-year flood event.

The ALJ understands KBOR's concerns about the flooding in the area. KBOR's witnesses testified about several severe flooding events over the years. Their concerns are valid, and it is TCB's burden to address these concerns in the design of its plant. The ALJ believes TCB has addressed the concerns. The fact that flooding may occur in a particular area is not sufficient to keep the plant from being built. Clearly, the Commission could have drafted its rules to completely prevent the construction of any wastewater plant in a 100-year flood plain. The Commission, however, allows for a plant to be built in the 100-year flood plain if it can be shown that the plant will not inundated. That has been shown in this case.

D. Whether the Facility Will Meet the Rule Requirements Intended to Reduce Nuisance Odor Conditions

The TCEQ rules provide for several options for reducing nuisance odor conditions. The rule applicable to this proceeding can be found at 30 TEX ADMIN. CODE § 309.13(e). The option applicable to TCB's wastewater treatment plant requires the plant "not be located closer than 150 feet to the nearest property line." 30 TEX ADMIN. CODE § 309.13(e)(1).

While there is no dispute that 150-foot buffer requirement has been satisfied, KBOR raises additional issues beyond the 150-foot buffer requirement.

1. OPIC's Position

OPIC recognizes that KBOR raises additional nuisance odor issues (such as smoke nuisance and wind direction) but concludes that their evidence (or arguments) does not outweigh the clear language of 30 TEX ADMIN. CODE § 309.13(e)(1), requiring only the 150-foot buffer.

2. KBOR's Position and Evidence

KBOR claims that TCB has not fully considered nuisance issues that may develop if the plant shuts down and problems that may occur to residents upwind of the plant. KBOR recognizes that the TCB plant provides for continuous aeration of the flow equalization basin, but it asserts that TCB has not considered the situation if the plant becomes inoperable due to power failure.

KBOR also asserts that the emissions from the plant will not stop at 150 feet, given the wind direction during certain times of the year.[91] KBOR suggests that TCB should have hired an expert to study wind speed and direction, and then discussed the results with the neighbors. Without absolute proof that the 150-foot buffer will protect the neighbors from the nuisance odors, KBOR argues that the permit should be denied.

3. TCB's Position and Evidence

TCB argues that it will meet nuisance requirement because TCB owns the required buffer zone area.[92] Despite the fact that TCB meets the 150-foot buffer requirement, TCB presented additional evidence to further satisfy the concerns of KBOR members. TCB states that it will use a submerged influent line off-loading process when wastewater is being delivered to the

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[91] KBOR Ex. 16, Golladay Direct at 9.

[92] TCB Ex. 13, Special Warranty Deed with Vendor's Lien of Carl A. Buckner; TCB Ex. 14, General Warranty Deed from Carl Buckner to TCB Rental.

plant and will have a metal building covering the top of the treatment units.[93] TCB claims that when the plant is functioning properly, there should be no strong odors produced at all.[94] TCB also points out that the nearest residence is about 7,000 feet from the plant.[95] Finally, TCB contends that KBOR's argument that the plant will be inoperable at least twice a year due to power failure is pure speculation and not supported by any evidence.

4. ALJ's Analysis

Under 30 TEX ADMIN. CODE § 309.13(e)(1), TCB may not locate its treatment facility closer than 150 to the nearest property line. The evidence shows that the nearest residence is 7,000 feet from the plant. TCB has clearly met the requirements of 30 TEX ADMIN. CODE § 309.13(e)(1). The nearest residence is almost a mile and half away from the plant. In addition, the evidence shows that the plant will have a submerged influent line off-loading process, and it will have a metal building covering the top of the units. Furthermore, the treatment plant will use an activated sludge aeration process that does not produce strong odors. It is not uncommon to have an activated sludge extended aeration plants in a residential area.[96]

KBOR's arguments deal with hypothetical and somewhat unlikely situations.[97] For example, KBOR argues that TCB should have performed wind studies to determine speed and wind direction during various times of the year. First, the TCEQ rules do not require wind studies. The only requirement is the 150-foot buffer. Second, a wind study, such as KBOR suggests, could include many variables. There would be no end to such a study if, as KBOR suggests, TCB had to measure wind speed and direction throughout the year. Third, a wind

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[93] TCB Ex. A, Buckner Prefiled Direct at 15-16; TCB Ex. B, D. Ray Young Prefiled Direct at 33-34; and TCB Ex. C, Shelley Young Prefiled Direct at 36-37.

[94] Tr. at 156-157.

[95] Tr. at 156.

[96] Tr. at 156-157.

[97] KBOR raised an issue about certain residents smelling smoke from the TCB property when there was a fire. The ALJ does not find that a single episode of smelling smoke is relevant to the nuisance issue.

study to measure odors for distances of a mile and half or more does would not produce precise results because it could not possibly account for every weather condition throughout the year. Fourth, a wind study of the type KBOR suggests would be extremely costly, which is likely why wind studies are not required. Finally, the ALJ has to assume that the Commission considered various suggestions from parties when it adopted the rule on nuisance odor requirements. The Commission is very specific that, for an activated sludge extended aeration plant, 150 foot buffer is the only requirement.

KBOR also claims that TCB has not considered nuisance problems that might occur if the plant became inoperable. Again, KBOR's argument is not likely to occur as often as KBOR suggests. There is simply no evidence that TCB's plant will be inoperable for an extended period of time twice a year. Furthermore, as discussed in prior sections of the PFD, there will be an operator at the plant five days a week, which is required under the Draft Permit. Finally, if the plant is not accessible for some reason, such as a flood, the plant can operate on its own for as long as a week, as previously discussed.

E. Whether the Applicant Can Meet the All-Weather Access Road Requirement in 30 TEX. ADMIN. CODE § 317.7(e)

The rule states, "Plants shall have at least one all-weather access road with the driving surface above the 100-year flood plain or be provided by an alternate method of access approved by the commission. 30 TEX. ADMIN. CODE § 317.7(e) (repealed August 28, 2008). After WaterEngineers, Inc. determined that the 100-year flood elevation at the plant site is 218.5 feet above mean sea level, it also realized that the 100-year floodplain elevation is significantly higher than the elevation of the nearest main access road to the site, FM 50. The surface elevation of FM 50 in front of TCB Rental's proposed plant site is approximately 208.5 feet above mean sea level. TCB determined that it would not make sense to build an 18-foot high plant access road because it would be 10 feet above FM 50, the only road that wastewater haul

trucks could use to access the facility.[98] If FM 50 were flooded, TCB would not be able to access any road to its plant regardless of the height. For these reasons, TCB requested a variance from part of 30 TEX. ADMIN. CODE § 317.7(e) as part of the plans and specifications review process.[99] On February 4, 2009, Mr. Herrin, on behalf of the TCEQ Executive Director, approved TCB's plans and specifications along with its variance request.[100] TCB did not seek a variance from the entirety of the all-weather access road requirement in 30 TEX. ADMIN. CODE § 317.7(e).[101] TCB has only sought a variance from the requirement in 30 TEX. ADMIN. CODE § 317.7(e) to construct the driving surface of its all-weather access road above the 100-year flood plain elevation. TCB plans to build an all-weather access road elevated to approximately 205-208.5 feet above mean sea level (the road will connect evenly with FM 50 in front of the plant), constructed with borrow pit fill that is lime-stabilized, compacted, and covered with an eight-inch flexible base and two inches of asphalt.[102] The road will have an all-weather surface even though it is not elevated above the 100-year floodplain.

TCB's access road is not acceptable to OPIC or KBOR. Both argue that it does not comply with 30 TEX. ADMIN. CODE § 317.7(e).

1. OPIC's Position

OPIC realizes that TCEQ Staff granted a variance, but it does believe that Commission Staff had the authority to grant a variance. OPIC argues that 30 TEX. ADMIN. CODE § 317.7(e) does not contemplate a no-access alternative. In fact, OPIC contends that granting a variance contravenes the rule, which requires access to the plant. OPIC states that a plant must be

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[98] TCB Ex. A, Buckner Prefiled Direct Testimony at 16-17; TCB Ex. B, D. Ray Young Prefiled Direct Testimony at 35-37; and TCB Ex. C, Shelley Young Prefiled Direct Testimony at 37.

[99] TCB Ex. 5, Letter from D. Ray Young on July 25, 2008 to Louis Herrin.

[100] TCB Ex.28, Letter dated 2-4-09 From Louis Herrin Approving Design Plans); Tr. 301-303.

[101] TCB Ex. 5, Letter from D. Ray Young on July 25, 2008 to Louis Herrin.

[102] Tr. 150-151; and TCB Ex. 23, Amended Plans and Specifications.

operated properly; therefore, if the plant cannot be accessed during a flood event, there is the likelihood that the plant would not operate safely. Although OPIC realizes that trucks would not be delivering wastewater during a flood event, OPIC is concerned with the wastewater that would already be on site and the risk it could pose to the environment. For example, if the equalization basin were full, OPIC claims that it would continue to discharge for 24 hours – the amount of time needed to process a basin filled to capacity.[103] Moreover, OPIC argues that the plant has to be accessible to during all weather conditions because a plant may need to be accessed for reasons other than simply shutting down the motors.

2. KBOR's Position and Evidence

KBOR first argues that a statute[104] must be given its plain meaning unless it is ambiguous. In this case, KBOR argues that TCB can do one of two things – build an access road above the 100-year flood plain or provide an alternative means of access, such as a boat. KBOR claims that TCB has done neither of these. Like OPIC, KBOR argues that Commission Staff does not have the authority to grant a variance, and to allow a variance of a mandatory requirement, is not a power granted to TCEQ. KBOR also claims that TCB has no mechanism in place to shut down the plant if it is not able to access the plant during a flood event. Therefore, TCB will not be able to ensure that the facility and it systems will be properly operated and maintained as required by the Draft Permit.

KBOR recognizes that there is a variance provision at 30 TEX. ADMIN. CODE § 317.1(f); however, it argues that provision relates only to design criteria and not safety, which is the provision the access road falls under. Even if the access road were considered a design feature, KBOR argues that without the road, there would be an unreasonable risk to the public that

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[103] Tr. at 173.

[104] Although KBOR references a statute, 30 TEX. ADMIN. CODE § 317.7(e) is a rule and it was not enacted by the legislature.

cannot be allowed. KBOR also contends that TCB has not provided a detailed engineering justification to support the variance request.

3. TCB's Position and Evidence

TCB rejects KBOR's statutory authority argument because KBOR discusses statutory construction of legislative intent without citing to a statute that provides the requirement set forth in 30 TEX. ADMIN. CODE § 317.7(e). TCB argues that there is no such statute. TCB argues that the propriety of Mr. Herrin's approval of the variance is a separate issue from the referred issue of whether TCB will comply with 30 TEX. ADMIN. CODE § 317.7(e). However, TCB contends that the approval is valid and must be considered. TCB opines that Mr. Herrin had the authority under the Water Code to approve the variance. According to TCB, TCEQ has a statutory mandate to adopt "any rules necessary to carry out its powers and duties" under the Texas Water Code,[105] and TCEQ has statutory authority to "review and approve plans and specifications for treatment facilities, sewer systems, and disposal systems that transport, treat, or dispose of primarily domestic wastes."[106] TCB asserts that Mr. Herrin's regulatory authority comes from Chapter 317 of the TCEQ Rules (now found in Chapter 217), and any variance request for a design may be approved by the Executive Director if submitted by an engineer in writing with a detailed justification and "if the variance would not result in an unreasonable risk to treatment plant performance, public health, or the waters in the state."[107]

TCB further maintains that there is no specific Texas Water Code provision addressing the access road design criteria; therefore, KBOR's argument that TCEQ is exceeding its authority does not stand because the legislature has said nothing about access roads during a 100-year flood.

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[105] TEX. WATER CODE ANN. § 5.103

[106] TEX. WATER CODE ANN. § 26.034.

[107] 30 TEX. ADMIN. CODE. § 317.1(f) (repealed 08/28/2008).

TCB alleges that KBOR's and OPIC's safety concerns are unfounded. TCB relies on Mr. Herrin's testimony in which he states this type of plant, like many others in Texas, could run on its own for an entire week without anyone checking on it.[108] In addition, Mr. Young testified that it would take 60-120 days for plant bacteria to die if they were not fed by incoming waste or otherwise.[109] Mr. Young testified that the plant is capable of safely running on its own automatically for the duration of a 100-year flood event, if needed, and furthermore special monitoring equipment, such as the Sensaphone 2000, will be installed to alert the operator of plant problems during the event.[110] With regard to the operation of the plant during a flood event, TCB states that if its plant is inaccessible for any period of time, the plant will complete the treatment process for whatever is left in the equalization basin at that particular time (if no new wastewater is coming in, no new treated effluent will be discharged). There will never be so much wastewater in the equalization basin that treatment will not be completed within 24 hours because that is the maximum theoretical detention time in the aeration basin, but discharge would likely cease much quicker depending on the circumstances.[111]

4. ALJ's Analysis

Although TCB plans to build an all-access road, it will not be above the 100-year flood plain. TCB's argument for seeking a variance is reasonable. Because FM 150 will likely be flooded during a 100-year flood event, it is not practical to have an access road above the 100-year flood plain level because one could not get to the access road if FM 150 is flooded. Furthermore, any alternative, such as a watercraft as suggested by KBOR, is not a realistic option during a 100-year flood. A boat would not be a safe alternative to access the plant during a 100-year flood.

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[108] Tr. 320-321.

[109] Tr. 58-60.

[110] TCB Ex. B, D. Ray Young Prefiled Direct Testimony at 37-39; TCB Ex. E, D. Ray Young Additional Prefiled Testimony at 21-22, and 28,-29; Tr. 158-161; and Tr. 614-616.

[111] TCB Ex. E, D. Ray Young Additional Prefiled Testimony at 21-22; Tr. 112-118; Tr. 139-140; Tr. 152; Tr. 172-173; Tr. 607-608; and TCB Ex.5, Letter from D. Ray Young on July 25, 2008 to Louis Herrin.

Although KBOR argues that a statute (or more precisely a rule)[112] must be given its plain meaning, the entirety of the rule must be considered. Section 317.7(e) allows for the access road or an alternative, but the analysis does not end there. Section 317.1(f) specifically allows for a variance of the design criteria for wastewater treatment facilities. This provision is set forth under "General Provisions" and applies to the design of a wastewater treatment facility, including any access road that is required. TCEQ has the authority under TEX WATER CODE ANN. § 5.103 to enact rules necessary to carry out its powers and duties. Clearly, TCEQ has the authority to allow variances in the design of wastewater treatment facilities. Although there are uniform criteria for these plants, TCEQ has to have the flexibility to allow for variances as evidenced by this case.[113]

A variance can be granted if it "would not result in an unreasonable risk to the treatment plant performance, public health, or the waters in the state." 30 TEX. ADMIN. CODE. § 317.1(f). On February 4, 2009, Mr. Herrin sent TCB a letter indicating his approval of the design of the plant, including the variance, and his opinion should be given the appropriate weight. Although OPIC and KBOR discount Mr. Herrin's opinion, the ALJ finds his opinion relevant and persuasive. Mr. Herrin is a professional engineer at TCEQ, and his job duties include evaluating the safety of wastewater permits. If Mr. Herrin believed the variance posed an unreasonable risk, he would be obligated to convey that to the ALJ and the Commission.[114] Furthermore, Mr. Herrin testified that this type of plant, like many others in Texas, could run on its own for an entire week without anyone checking on it.[115] By granting the variance, Mr. Herrin looked at the

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[112] The ALJ assumes that KBOR meant to refer to the rule and not the statute because the access road requirement is part of a rule not a statute. Legislative intent would not be applicable because the rule is in dispute not the statute.

[113] As the ALJ discussed earlier in the PFD, there are many wastewater treatment plants in Texas in the 100-year flood plain.

[114] Mr. Herrin testified at the hearing and never indicated that the variance posed an unreasonable risk of any kind.

[115] Tr. 320-321.

type of plant involved and concluded that the variance he was granting did not present an unreasonable risk.

The evidence further shows that the plant is capable of safely running on its own automatically for the duration of a 100-year flood event. Furthermore, TCB intends to install special monitoring equipment to alert the operator of plant problems during the event.[116] TCB adequately explained what would happen to the operation of the plant during a flood event. If the plant is inaccessible for any period of time, the plant will complete the treatment process for whatever is left in the equalization basin at that particular time (if no new wastewater is coming in, no new treated effluent will be discharged). There will never be so much wastewater in the equalization basin that treatment will not be completed within 24 hours because that is the maximum theoretical detention time in the aeration basin, but discharge would likely cease much quicker.[117] TBC has taken the precautions to limit any risk that might occur if the plant becomes inaccessible. For these reasons, the variance for the all-weather access road should be granted because it will not present an unreasonable risk to the plant performance, public health, or the nearby waters.

F. Whether the Applicant Can Meet the Private Water Well Buffer Requirement in 30 TEX. ADMIN. CODE § 309.13

The fifth referred issue requires that TCB meet the water well buffer requirement. The rule states, "A wastewater treatment plant may not be closer than . . . 250 feet from a private water well." 30 TEX ADMIN. CODE § 309.13(c).

TCB contracted with Atlas Environmental Research to search for wells within a one-mile radius of the proposed plant, and it found that there were no private wells within the buffer

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[116] TCB Ex. B, D. Ray Young Prefiled Direct Testimony at 37-39; TCB Ex. E, D. Ray Young Additional Prefiled Testimony at 21-22, and 28,-29; Tr. 158-161; and Tr. 614-616.

[117] TCB Ex. E, D. Ray Young Additional Prefiled Testimony at 21-22; Tr. 112-118; Tr. 139-140; Tr. 152; Tr. 172-173; Tr. 607-608; and TCB Ex.5, Letter from D. Ray Young on July 25, 2008 to Louis Herrin.

zone.[118] The closest private well is about 1,600 feet away from the proposed plant.[119] No party contested this issue. Therefore, the evidence shows that TCB can meet the private water well buffer requirement in 30 TEX ADMIN. CODE § 309.13(c).

G. Assessment of Transcript Costs

A transcript was prepared for this case. All parties actively participated in this case. However, the ALJ believes that TCB should be responsible for the transcript costs.[120] Of course, KBOR would be responsible for the cost of its own copy of the transcript. None of the parties raised this as an issue at the hearing or in their post-hearing briefs. Accordingly, the ALJ recommends that TCB pay the transcript costs. 30 TEX. ADMIN. CODE § 80.23 (d)(1).

V. CONCLUSION

In conclusion, the ALJ finds that none of the concerns of OPIC or KBOR warrant denial of the application or a refusal to issue the requested permit. The findings of fact and conclusions of law supporting the ALJ's recommendations herein are set out in a separate proposed final order that is being sent to the Commission along with this PFD.

In addition to addressing the issues referred by the Commission, the proposed order also includes a conclusion of law and an ordering provision stating that the terms of the permit and the ED's review of the application comply with all applicable federal and state requirements. These items are included as a convenience to the Commission to allow it to more easily issue a

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[118] TCB Ex. A, Buckner Prefiled Direct at 18; TCB 10, Atlas Report.

[119] TCB Ex. B, D. Ray Young Prefiled Direct at 17-18.

[120] The ALJ believes that TCB has already paid for the transcript costs, and it has not asserted that any other party should pay for any of the costs.

single decision on the application in accordance with 30 TEX. ADMIN. CODE § 50.117(g). The ALJ makes no recommendation regarding issues not referred for hearing.

SIGNED June 5, 2009.

MICHAEL J. O'MALLEY
ADMINISTRATIVE LAW JUDGE
STATE OFFICE OF ADMINISTRATIVE HEARINGS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AN ORDER

GRANTING THE APPLICATION OF TCB RENTAL, INC. FOR NEW WASTEWATER PERMIT, PROPOSED TEXAS POLLUTANT DISHARGE ELIMINATION SYSTEM, PERMIT NO. WQ0014725001
SOAH DOCKET NO. 582-08-2177
TCEQ DOCKET NO. 2007-1765-MWD

On _____, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application (Application) of TCB Rental, Inc., for a new wastewater permit, proposed Texas Pollutant Discharge Elimination System (TPDES), Permit No. WQ0014725001. A Proposal for Decision (PFD) was presented by Michael J. O'Malley, an Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH), who conducted a hearing in this case from February 18, 2009 through February 20, 2009, in Austin, Texas.

After considering the ALJ's PFD, the Commission adopts the following Findings of Fact and Conclusions of Law:

I. FINDINGS OF FACT

1. TCB Rental, Inc. (TCB or Applicant) filed its application with the Commission on June 29, 2006.

2. The Application requests a new permit for a wastewater treatment plant that will use an extended aeration mode of the activated sludge process mode. The primary difference between TCB's plant and other domestic wastewater treatment plants in Texas is that it has no wastewater collection lines that directly connect the facility with customers.

3. TCB uses trucks to transport the wastewater to the plant for treatment.

4. The facility will be located in Burleson County, Texas, on Farm-to-Market (FM) Road 50, approximately 1.4 miles south of the intersection of FM 50 and FM 1361.

5. Treated effluent is proposed to be discharged at a daily average flow not to exceed 25,000 gallons a day.

6. The Executive Director of the TCEQ declared the Application administratively complete on July 20, 2006.

7. On August 3, 2006, the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit was published in the *Burleson County Tribune*, a newspaper that is regularly published or circulated in Burleson County.

8. The proposed effluent limits to comply with the Draft Permit include a daily average of 10 milligrams/liter (mg/L) (5-day) carbonaceous biochemical oxygen demand, 15 mg/L total suspended solids, and 3 mg/L ammonia nitrogen. Additionally, the effluent will be required to maintain a chlorine residual of at least 1.0 mg/L and a minimum dissolved oxygen level of 4.0 mg/L.

9. These are standard TPDES permit effluent limits for domestic wastewater treatment plants in the geographic area where TCB's proposed plant would be located.

10. Under the Draft Permit, TCB will not haul industrial or hazardous wastes.

11. On December 21, 2006, the Notice of Application and Preliminary Decision for New Wastewater Permit was published in the *Burleson County Tribune*. A public notice and comment period followed.

12. On February 13, 2008, the TCEQ Commissioners considered hearing requests.

13. The TCEQ Commissioners granted the hearing requests of Jean and Leonard Killgore, Douglas R. Kettler, and Koontz Bayou Old River Group (KBOR).

14. On March 11, 2008, the Commission referred the following issues to the SOAH for hearing:

    a. Whether the proposed discharge will be in compliance with regulations that are intended to protect water quality or regulations that are intended to protect the health and safety of humans, native wildlife, or livestock;

    b. Whether the facility is located in a one-hundred (100) year flood plain and if so, whether the Applicant will comply with Section 309.13(a) of the Commission rules;

    c. Whether the facility will meet the rule requirements intended to reduce nuisance odor conditions;

    d. Whether the Applicant can meet the all-weather access road requirement in 30 TEX. ADMIN CODE § 317.7(e); and

    e. Whether the Applicant can meet the private water well buffer requirement in 30 TEX. ADMIN CODE § 309.13(e).

15. On April 22, 2008, the Chief Clerk mailed notice of the preliminary hearing to the parties, protestants, and interested persons. On April 3, 2008, notice of the preliminary hearing was published in the *Burleson County Tribune*, a newspaper that is regularly published or circulated in Burleson County.

16. The preliminary hearing was held on May 5, 2008, in Austin, Texas. At the preliminary hearing, the following were admitted as parties: Applicant, the Office of Public Interest Counsel, KBOR, and Jean and Leonard Killgore.

17. The hearing on the merits was held on February 18-20, 2009, in Austin, Texas. The record closed April 20, 2009, after the submission of written closing arguments and replies.

18. TCB currently hauls domestic wastewater for mobile-home residences at oil and gas drilling sites.

19. The mobile-home residences produce domestic wastewater that is delivered to and stored in a holding tank until TCB picks it up to deliver it for treatment.

20. Municipally-owned facilities currently treat the domestic wastewater TCB hauls.

21. After relying on these facilities for many years, TCB seeks to build its own facility to treat its hauled domestic wastewater.

22. TCB owns the property on which the proposed wastewater treatment plant will be located as well as the property where the treated effluent will be discharged.

23. The treated effluent will flow into an unnamed ditch on TCB's property for almost a mile, then to the Koontz Bayou Drain, then to Koontz Bayou itself, then to the Old River Basin, then to the Brazos River above the Navasota River in Segment No. 1242 of the Brazos River Basin.

24. The entire discharge route up to the point where the unnamed ditch empties into the Koontz Bayou Drain is now located within property owned by either TCB or Carl Buckner, its President and Owner.

25. The effluent limits for the proposed discharge included in the Draft Permit were modeled by TCEQ Staff.

26. The standards were set using TCEQ procedures used in other domestic wastewater treatment permits.

27. TCEQ Staff performed an analysis on the impact of the effluent on the receiving waters. TCEQ Staff determined that the existing water quality uses would not be impaired by TCB's permit.

28. The analysis indicated that no significant degradation of water quality is expected in the in the water downstream, and the existing uses will be maintained and protected.

29. The influent is expected to remove over 96% of the incoming biochemical oxygen demand and will be disinfected to allow discharge into a stream rated for recreational contact.

30. If underloading occurs and the plant needs additional wastewater, TCB will bring wastewater from other areas that TCB serves.

31. Because TCB's headquarters is located in Brenham, Texas near the plant site, bringing extra loads to the site can easily be done.

32. If the influent is underloading or overloading TCB's plant by as much as 50% either way, the flexibility of the plant's extended aeration process will allow the plant to handle the influent without adversely affecting effluent quality.

33. Koontz Bayou receives water from multiple sources, not just the unnamed ditch that constitutes the receiving stream for TCB's effluent.

34. The proposed effluent is adequate to ensure the dissolved oxygen level will be maintained above the criteria established by the Standards Team for the unnamed drainage ditch (2 mg/L) and the Koontz Bayou Drain (2 mg/L).

35. The receiving stream will accommodate TCB's proposed effluent without negatively impacting the stream's vegetation.

36. The influent from the mobile-residences will not be more highly concentrated than ordinary domestic wastewater.

37. The domestic wastewater from the mobile-home residences will have adequate dilution.

38. TCB adequately assumed the organic strength of the influent based on the wastewater source.

39. Although residential domestic wastewater strength is approximately 200 mg/L BOD_5 for plant design purposes, TCB used a more conservative BOD_5 figure (300mg/L) (more commonly used for commercial plants).

40. TCB will not allow non-domestic wastewater to be delivered to and treated at its plant.

41. TCB's proposed wastewater treatment plant is located in a 100-year floor plain.

42. TCB's plant will operate safely on its own for the duration of a 100-year flood event because TCB intends to install a special monitoring device, such as the Sensaphone 2000, to alert the operator of plant problems during the event.

43. The interpolation process used by TCB to determine the site's100-year flood elevation is a proper method for determining the 100-year flood plain.

44. The 100-year flood elevation is approximately 218.5 feet above the mean sea level. The proposed facility is 202.5 feet above mean sea level and the depth of the water in a 100-year flood plain event around the facility would be 16 feet.

45. The maps used in the interpolation process were the most current maps and acceptable for use in determining the 100-year flood level.

46. TCB's plant will be protected from inundation and damage during a 100-year flood event.

47. TCB's wastewater treatment plant units will be protected by making the walls of the treatment plant higher than the 100-year flood level and by elevating other equipment above that level.

48. The 12-inch walls containing the treatment units have an elevation 220 feet above mean sea level and will be made of steel-reinforced concrete with a specified minimum compressive strength of 4,000 pounds per square inch, along with other beneficial specifications. This type of concrete usually provides compressive strength even stronger, typically in the 5,000-6,000 pounds-per-square-inch range.

49. TCB has included a four-inch check valve on the effluent line (the connected effluent line is located only slightly below elevation 218.5 above mean sea level) leading away from the plant to prevent inundation of the chlorine chamber.

50. The check valve allows flow out of the plant but prevents flow from going back into the plant.

51. After TCB added the check valve to its design plan, TCEQ Staff fully approved of the design plan for TCB's wastewater treatment plant and indicated that all units of the plant will be protected from the 100-year flood.

52. TCB hired Terracon to develop a Geotechnical Engineering Report (a report to analyze the soil and foundation around the wastewater treatment plant).

53. The plant will be supported by underreamed footings founded at least 20 feet below the existing ground surface and 25 feet below the bottom of TCB's treatment plant.

54. The underreamed footings anchor the plant in place at that depth.

55. The anchors will keep the plant from floating away if there are uplift or buoyancy forces caused by flood waters.

56. The plant foundation will be poured on void boxes, rather than on grade, eliminating the effect of any soil movement that may occur at the base of the plant.

57. The external pipes will be protected because they are made of protective ductile iron pipe with retained follower glands, so that they will not be damaged or disconnected by movement of the soil.

58. The strength of the 12-inch concrete wall surrounding the plant and the solid footings of the foundation of the plant demonstrate that this plant will withstand a 100-year flood event.

59. The nearest residence to TCB's plant is 7,000 feet away.

60. TCB's wastewater treatment plant will have a submerged influent line off-loading process, and it will have a metal building covering the top of the units.

61. TCB's wastewater treatment plant will use an activated sludge aeration process that does not produce strong odors.

62. There will be a plant operator at the plant five days a week. If the plant is not accessible for some reason, such as a flood, the plant can operate on its own for as long as a week.

63. The 100-year floodplain elevation of 218.5 feet above mean sea level is significantly higher than the elevation of the nearest main access road to the TCB site, FM 50.

64. The surface elevation of FM 50 in front of TCB's proposed plant site is approximately 208.5 feet above mean sea level.

65. TCB requested a variance from part of 30 TEX. ADMIN. CODE § 317.7(e) as part of the plans and specifications review process.

66. TCB did not seek a variance from the entirety of the all-weather access road requirement in 30 TEX. ADMIN. CODE § 317.7(e). With the variance, TCB would build an all-weather access road to the plant, but the road would not be above the 100-year flood plain elevation.

67. On February 4, 2009, Louis C. Herrin, III, P.E., on behalf of the TCEQ Executive Director, approved TCB's plans and specifications along with its variance request.

68. By granting the variance, Mr. Herrin looked at the type of plant involved and concluded that the variance he was granting did not present an unreasonable risk.

69. TCB plans to build an all-weather access road elevated to approximately 205-208.5 feet above mean sea level (the road will connect evenly with FM 50 in front of the plant), constructed with borrow pit fill that is lime-stabilized, compacted, and covered with an eight-inch flexible base and two inches of asphalt.

70. If FM 50 were flooded, TCB would not be able to access any road to its plant regardless of the height.

71. It would not be practical to build an 18-foot high plant access road because it would be 10 feet above FM 50, the only road that wastewater haul trucks could use to access the facility.

72. Any alternative to access the plant during a 100-year flood event, such as a watercraft, would not be a viable option during; a boat would not be a safe alternative to access the plant during a 100-year flood.

73. TCB's wastewater plant is capable of safely running on its own automatically for the duration of a 100-year flood event.

74. If TCB's plant is inaccessible for any period of time, the plant will complete the treatment process for the wastewater left in the equalization basin at that particular time (if no new wastewater is coming in, no new treated effluent will be discharged).

75. There will never be so much wastewater in the equalization basin that treatment will not be completed within 24 hours because that is the maximum theoretical detention time in the aeration basin.

76. TCB has taken the precautions to limit any risk that might occur if the plant becomes inaccessible.

77. The closest private well is approximately 1,600 feet away from the wastewater treatment plant.

II. CONCLUSIONS OF LAW

1. The Commission has jurisdiction over this matter pursuant to Texas Water Code Chapter 26.

2. SOAH has jurisdiction over all matters relating to the conduct of a hearing in this proceeding, including the preparation of a proposal for decision with findings of fact and conclusions of law, pursuant to Texas Government Code Chapter 2003.

3. Applicant and TCEQ have satisfied all applicable public notice requirements.

4. In accordance with TEX. WATER CODE ANN. § 26.041, TCB's discharge under the terms of the Draft Permit will not be injurious to public health.

5. In accordance with TEX. WATER CODE ANN. § 26.003, TCB's discharge under the terms of the Draft Permit will be in compliance with the regulations intended to protect water quality, health and safety of humans, native wildlife, and livestock.

6. TCB's wastewater treatment plant will be protected from inundation and damage during a 100-year flood event in compliance with 30 TEX. ADMIN. CODE § 309.13(a).

7. TCB's wastewater treatment plant will meet the requirements intended to reduce nuisance odors pursuant to 30 TEX. ADMIN. CODE § 309.13(e)(1).

8. TCEQ has the authority under TEX WATER CODE ANN. § 5.103 to allow variances in the design of wastewater treatment facilities.

9. Although TCB's all-weather access road is not above the 100-year flood plain as required under 30 TEX. ADMIN. CODE § 317.7(e), the Commission allows for a variance of the design criteria for wastewater treatment facilities. 30 TEX. ADMIN. CODE § 317.1(f).

10. The variance for the all-weather access road should be granted because granting the variance will not present an unreasonable risk to the plant performance, public health, or the nearby waters. 30 TEX. ADMIN. CODE § 317.1(f).

11. TCB meets the private well buffer requirement under 30 TEX. ADMIN. CODE § 309.13(c).

12. It is reasonable for TCB to pay the transcript costs for the hearing in this case. 30 TEX. ADMIN. CODE § 80.23 (d)(1).

13. TCB's application should be granted, and Permit No. WQ0014725001 should be issued.

14. In accordance with 30 TEX. ADMIN. CODE § 50.117, the Commission issues this Order and the attached permit as its single decision on the permit application. Information in the agency record of this matter, which includes evidence admitted at the hearing and part of the evidentiary record, document the Executive Director's review of the permit application, including that part not subject to a contested case hearing, and establishes that the terms of the attached permit (Exhibit A) are appropriate and satisfy all applicable federal and state requirements.

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, IN ACCORDANCE WITH THESE FINDINGS OF FACT AND CONCLUSIONS OF LAW, THAT:

1. In accordance with 30 TEX. ADMIN. CODE § 50.117, the Commission issues this Order granting TPDES Permit No. WQ0014725001 to TCB Rental, Inc, which is attached as Exhibit A.

2. The Commission adopts the Executive Director's Response to Public Comment in accordance with 30 TEX. ADMIN. CODE § 50.117. Also, in accordance with Section 50.117, the Commission issues this Order and the attached permit as its single decision on the permit application. Information in the agency record of this matter, which includes evidence admitted at the hearing and part of the evidentiary record, document the Executive Director's review of the permit application, including that part not subject to a contested case hearing, and establishes that the terms of the attached permit are appropriate and satisfy all applicable federal and state requirements.

3. All other motions, requests for entry of specific Findings of Fact or Conclusions of Law, and any other requests for general or specific relief, if not expressly granted herein, are hereby denied.

4. The effective date of this Order is the date the Order is final, as provided by TEX. GOV'T CODE ANN. § 2001.144 and 30 TEX. ADMIN. CODE § 80.273.

5. The Commission's Chief Clerk shall forward a copy of this Order to all parties.

6. If any provision, sentence, clause, or phase of this Order is for any reason held to be invalid, the invalidity of any provision shall not affect the validity of the remaining portions of this Order.

ISSUED:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

_____

Buddy Garcia, Chairman
For the Commission

EXHIBIT A

TPDES PERMIT NO. WQ0014725001
[For TCEQ Office Use Only:
EPA ID No. TX0128899]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

THE STATE OF TEXAS
COUNTY OF TRAVIS
I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A TEXAS COMMISSION ON ENVIRONMENTAL QUALITY DOCUMENT, WHICH IS FILED IN THE PERMANENT RECORDS
AUG - 7 2008
OF THE COMMISSION GIVEN UNDER MY HAND AND THE SEAL OF THIS AGENCY
LADONIA CASTAÑUELA, CHIEF CLERK
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCB Rental, Inc.

whose mailing address is

P.O. Box 1593
Brenham, Texas 77834

is authorized to treat and discharge wastes from the TCB Rental Wastewater Treatment Facility, SIC Code 4952

located on the west side of Farm-to-Market Road 50, approximately 1.5 miles south of the intersection of Farm-to-Market Road 50 and Farm-to-Market Road 1361 in Burleson County, Texas

to an unnamed drainage ditch; thence to Koontz Bayou Drain; thence to Koontz Bayou; thence to the Old River; thence to the Brazos River Above Navasota River in Segment No. 1242 of the Brazos River Basin

only according with effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, **December 1, 2011.**

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.025 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 69 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Minimum Self-Monitoring Requirements	
	Daily Avg mg/l(lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Measurement Frequency	Single Grab Sample Type
Flow, MGD	Report	N/A	Report	N/A	Five/week	Instantaneous
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (2.1)	15	25	35	One/week	Grab
Total Suspended Solids	15 (3.1)	25	40	60	One/week	Grab
Ammonia Nitrogen	3 (0.6)	6	10	15	One/week	Grab

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.

4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.

6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

TCB

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DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§ 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code §§ 5.103 and 5.105, and the Texas Health and Safety Code §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in Section 26.001 of the Texas Water Code and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

   a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.

   b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

   c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

   d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

   e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

   f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calender month.

2. Concentration Measurements

   a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

      i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

      ii. For all other wastewater treatment plants - When four samples are not available in a calender month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

   b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

   c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calender month.

   d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.

      The "daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

e. Fecal coliform bacteria concentration - the number of colonies of fecal coliform bacteria per 100 milliliters effluent. The daily average fecal coliform bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calender month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calender month. For any measurement of fecal coliform bacteria equaling zero, a substituted value of one shall be made for input into either computation method. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calender week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calender month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calender month.

3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids which have not been classified as hazardous waste separated from wastewater by unit processes .

6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form, that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act, the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.

3. Records of Results

   a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

   b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

   c. Records of monitoring activities shall include the following:

      i. date, time and place of sample or measurement;
      ii. identity of individual who collected the sample or made the measurement.
      iii. date and time of analysis;
      iv. identity of the individual and laboratory who performed the analysis;
      v. the technique or method of analysis; and
      vi. the results of the analysis or measurement and quality assurance/quality control records.

      The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

   If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

   All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

   Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

i. Unauthorized discharges as defined in Permit Condition 2(g).
ii. Any unanticipated bypass which exceeds any effluent limitation in the permit.
iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. One hundred micrograms per liter (100 µg/L);
ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
iv. The level established by the TCEQ.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. Five hundred micrograms per liter (500 µg/L);
ii. One milligram per liter (1 mg/L) for antimony;
iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the CWA if it were directly discharging those pollutants;

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

c. For the purpose of this paragraph, adequate notice shall include information on:

i. The quality and quantity of effluent introduced into the POTW; and
ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

   a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

   b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

      i. Violation of any terms or conditions of this permit;
      ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
      iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

   a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

   b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

   c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

   d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.

   e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

   f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and Texas Water Code Section 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

   g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

   h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

   i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal Clean Water Act, §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

   a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.

   b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in Texas Water Code Section 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

   a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or

      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;

      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

   c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

   d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

   e. In accordance with the Texas Water Code § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

   f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit

shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

   a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

   b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

   This permit does not authorize any activity of hazardous waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

   Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to Chapter 11 of the Texas Water Code.

8. Property Rights

   A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

   The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

    The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

    a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
       i. the permittee;
       ii. an entity (as that term is defined in 11 USC, §101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
       iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.

    b. This notification must indicate:
       i. the name of the permittee and the permit number(s);
       ii. the bankruptcy court in which the petition for bankruptcy was filed; and
       iii. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Land Application Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under Texas Water Code § 7.302(b)(6).

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC § 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities which generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75 percent of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90 percent of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75 percent of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the judgement of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC-149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

   b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission, and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85 percent, unless otherwise authorized by this permit.

11. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:

i. Volume of waste and date(s) generated from treatment process;
ii. Volume of waste disposed of on-site or shipped off-site;
iii. Date(s) of disposal;
iv. Identity of hauler or transporter;
v. Location of disposal site; and
vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. **The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner which protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.

2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.

3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method, which receives the prior approval of the TCEQ for the contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division and the Regional Director (MC Region 9) within 7 days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 9) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceed the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

Pollutant	Ceiling Concentration (milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. Below are the additional requirements necessary to meet the definition of a Class A sludge.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC Section 312.82(a)(2)(A) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC Section 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC Section 312.82(a)(2)(C)(iv-vi) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of shall be treated in one of the processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1 -

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U. S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The executive director will accept from the U. S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.

vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC Section 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following alternatives 1 through 10 for Vector Attraction Reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Volatile solids must be reduced by less than 17 percent to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15 percent to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Sewage sludge shall be injected below the surface of the land.

ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

iii. When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test - once during the term of this permit

PCBs - once during the term of this permit

All metal constituents and Fecal coliform or Salmonella sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC Section 312.46(a)(1):

Amount of sewage sludge (*) metric tons per 365-day period	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) The amount of bulk sewage sludge applied to the land (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC Section 312.7.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

Pollutant	Cumulative Pollutant Loading Rate (pounds per acre)
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

Pollutant	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

* Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.

2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC Section 312.44.

3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:

   a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

   b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.

   c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

   a. The location, by street address, and specific latitude and longitude, of each land application site.

   b. The approximate time period bulk sewage sludge will be applied to the site.

   c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC Section 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludges, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

   "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC Section 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC Section 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained.

The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC Section 312.47 for persons who land apply.

1. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
2. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
3. The number of acres in each site on which bulk sludge is applied.
4. The date and time sludge is applied to each site.
5. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
6. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 9) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 1 of each year the following information:

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. which applies to the permittee.
3. Toxicity Characteristic Leaching Procedure (TCLP) results.
4. Identity of hauler(s) and TCEQ transporter number.
5. PCB concentration in sludge in mg/kg.
6. Date(s) of disposal.
7. Owner of disposal site(s).
8. Texas Commission on Environmental Quality registration number, if applicable.
9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
11. Level of pathogen reduction achieved (Class A or Class B).
12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
13. Vector attraction reduction alternative used as listed in Section I.B.4.
14. Annual sludge production in dry tons/year.

15. Amount of sludge land applied in dry tons/year.

16. The certification statement listed in either 30 TAC Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.

17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk sewage sludge is applied.

    c. The date and time bulk sewage sludge is applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.

    e. The amount of sewage sludge (i.e., dry tons) applied to each site.

    The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a Municipal Solid Waste Landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

D. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division and the Regional Director (MC Region 9) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 9) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.

F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 9) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year the following information:

1. Toxicity Characteristic Leaching Procedure (TCLP) results.
2. Annual sludge production in dry tons/year.
3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
4. Amount of sludge transported interstate in dry tons/year.
5. A certification that the sewage sludge meets the requirements of 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
6. Identity of hauler(s) and transporter registration number.
7. Owner of disposal site(s).
8. Location of disposal site(s).
9. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

   This Category C facility must be operated by a chief operator or an operator holding a Category C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.

3. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 1242 of the Brazos River Basin and any subsequent updating of the water quality model for Segment No. 1242, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC Section 305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.

4. The permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC Section 309.13(e).

5. Reporting requirements according to 30 TAC Sections 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 9) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first.

6. The permittee shall provide facilities for the protection of its wastewater treatment facilities from a 100-year flood.

7. Prior to construction of the facility, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary submittal letter in accordance with the requirements in 30 TAC Section 317.1. If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with 30 TAC Chapter 317, Design Criteria for Sewerage Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2 of the permit.